

# **Report on the Kindergarten Readiness Assessment (KRA)**

## **Joint Chairmen's Report (HB70) (p. 100-101)**

**Submitted by the Maryland State Department of Education**

**December 15, 2015**

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## **INTRODUCTION**

Maryland State Department of Education, Division of Early Childhood Development, is submitting the following report to the budget committees on the Early Learning Assessment (ELA) and Kindergarten Readiness Assessment (KRA), both components of the *Ready for Kindergarten (R4K): Maryland's Early Childhood Comprehensive Assessment System* program. The report includes an update of all improvements made to KRA v1.0 by Maryland, including connectivity issues, adjustments in the length of the assessments, and time required to administer the assessment. The report also identifies any issues encountered and feedback received from the fall 2015 administration of the KRA, including the reporting of the percent of tests administered using paper and online. Finally, the report includes details regarding the first administration of the ELA, including any issues identified by educators and potential resolutions.

## **KINDERGARTEN READINESS ASSESSMENT (KRA)**

In December 2011, Maryland and Ohio were awarded Race to the Top-Early Learning Challenge Grants in the amount of \$50 and 69.9 million, respectively, over four years. These funds have supported the partnership between Maryland and Ohio to revise and enhance state kindergarten entry assessments, develop pre-k and kindergarten formative assessments, and conduct a rigorous review of existing screening tools for children. These efforts have culminated in a new Ready for Kindergarten (R4K) system, with the Kindergarten Readiness Assessment (KRA) being the cornerstone of the new system, supported by a statewide technology infrastructure and a professional development system based on the following principles:

## Report on Kindergarten Readiness Assessment (HB70)

- Aligned to both states' guidelines and standards for young children, birth through age six, including Maryland's College and Career-Ready Standards.
- Linked to state longitudinal data systems to allow for consistent and meaningful reporting at the student, class, school, district, and state levels.
- Designed to be maximally accessible to young children with a wide range of background experiences and developmental needs.
- Vertically articulated to allow for measurement of growth over time.
- Systematically developed within a framework grounded in theory, research, and best practice to ensure its validity and reliability.
- Field tested by a group of Maryland and Ohio kindergarten teachers and reviewed by a national technical advisory committee comprised of developmental psychologists, early childhood experts, and psychometricians.

A number of partners have played a vital role in executing Maryland and Ohio's vision for improving kindergarten readiness and early childhood assessments, including Johns Hopkins University Center for Technology in Education (JHU-CTE), WestEd, state advisory committees in each state, and a national technical advisory committee (TAC) advising both states and facilitated by the Council of Chief State School Officers (CCSSO). Maryland and Ohio provided the insight and vision for the development and implementation of the new system, with Maryland serving as the fiscal agent. JHU-CTE staff led the development of the technology infrastructure to support administration, scoring and importing and exporting data from each state's data system, design and implementation of the professional development component for trainers and teachers, and coordination of project partners, research, and the Institutional Review Board requirements. WestEd's Assessment and Standards Development Services and its Center

for Child and Family Studies provided consultation and expertise in the development of assessment items, which included reliability testing and validation of the items through content review and bias and sensitivity focus groups, and pilot and field tests using both Maryland and Ohio kindergarten teachers in all groups.

### **Evaluation of First KRA Administration**

KRA 1.0 was fully operational for all kindergarten students in the fall of 2014. During census administration, teachers administered the new KRA to all kindergarten students, determining the readiness level of each kindergartener in Maryland.

On May 26, 2015, after an extensive reliability analysis and the standard setting process (more details provided below), the school readiness information for school year 2014-2015 was finalized and made available online at [www.marylandpublicschools.org](http://www.marylandpublicschools.org) and at [www.readyatfive.org](http://www.readyatfive.org). Hard copies of the report are also available upon request from the Maryland State Department of Education, Division of Early Childhood Development, Early Learning Office, at 410-767-0335.

The key idea for interpreting Maryland's KRA results is the standard that has been set for what kindergarten teachers and early learning specialists from Maryland consider school readiness based on the new and more rigorous College and Career-Ready Standards. The subset of skills and behaviors are research based and have been defined as critical for being ready for school. They comprise skills across four domains of learning – Language/Literacy, Mathematics, Social Foundations, and Physical Development. The KRA operationalizes school readiness indicators within each developmental content area. This means that a kindergartener must

demonstrate these skills and behaviors across all the four domains in order to reach a composite score that represents “demonstrating readiness.” A student who has not yet demonstrated those skills in one of the domains has either a composite score of “approaching” or “emerging” readiness. The KRA results are not used to prohibit a child from entering kindergarten or for high-stakes decisions. The KRA is specifically designed to:

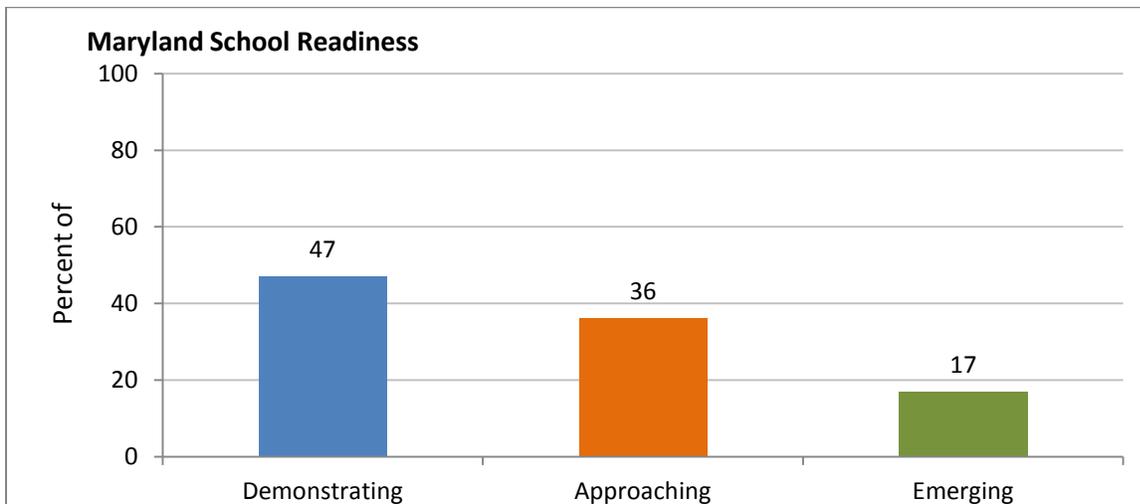
- measure entering students’ skills and abilities in relation to end-of-prekindergarten standards;
- identify individual children’s needs and necessary supports;
- assist teachers with data-driven instructional planning, intervention, and enrichment;
- inform decision-makers about professional development needs;
- inform prior early learning and development stakeholders; and
- provide families with information about their children’s learning and development.

In school year 2013-14, when the MMSR (Maryland Model for School Readiness) assessment was administered for the last time, 83 percent of all kindergarteners were fully ready for the kindergarten curriculum that followed the previous Maryland State Curriculum. The new Maryland College and Career-Ready Standards have raised the bar for all school age students, including kindergarteners. The KRA measures are different from the ones used in the MMSR. This year’s results do not represent kindergarteners that are less prepared than the group from previous years but the first group of children starting kindergarten that is being assessed with a more rigorous assessment measuring school readiness in such a way to prepare them for 21<sup>st</sup> century learning.

During census administration in the fall 2014, 3,500 teachers administered KRA v1.0 to

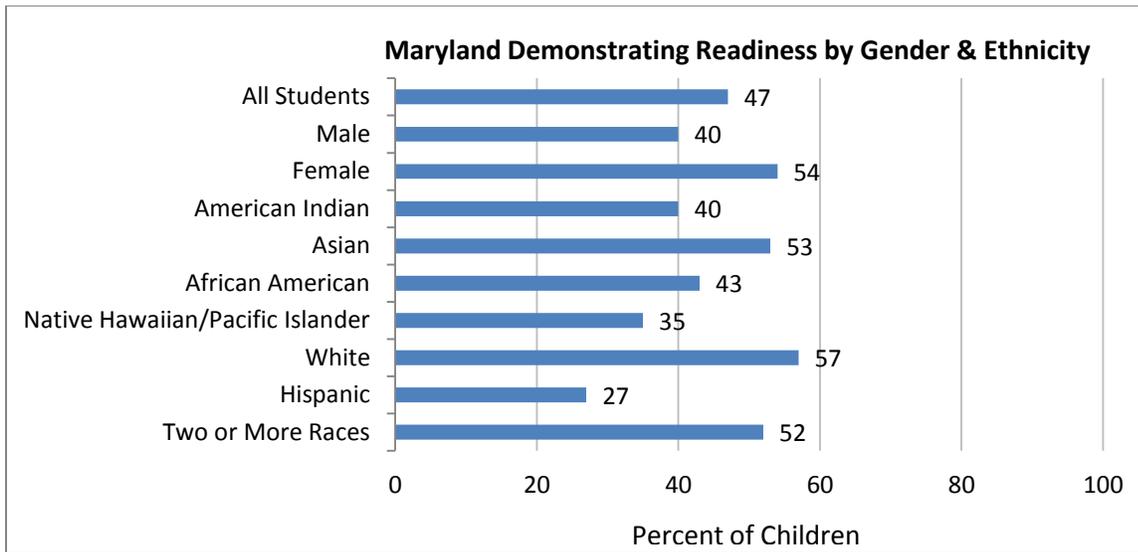
66,281 children, determining the readiness level of each kindergartener in Maryland. Based on the 2014-2015 Kindergarten Readiness Assessment (KRA) results (see graph 1 below), nearly half (47%) of all Maryland children displayed the foundational skills assessed indicating they were fully ready for kindergarten. More than a third (36%) were approaching readiness. Only 17% of children were assessed as emerging.

**Graph 1:** State of Maryland KRA Results for 2014-2015



As graph 2 shows, fifty-four percent of females and forty percent of males were reached full readiness. Although more than half of Asian children (53%), White children (57%) and children endorsing two or more races (52%) reached full readiness, a lower percentage of Hispanic (27%) children demonstrated full readiness.

**Graph 2: Maryland Percentage Demonstrating Readiness by Gender & Ethnicity**



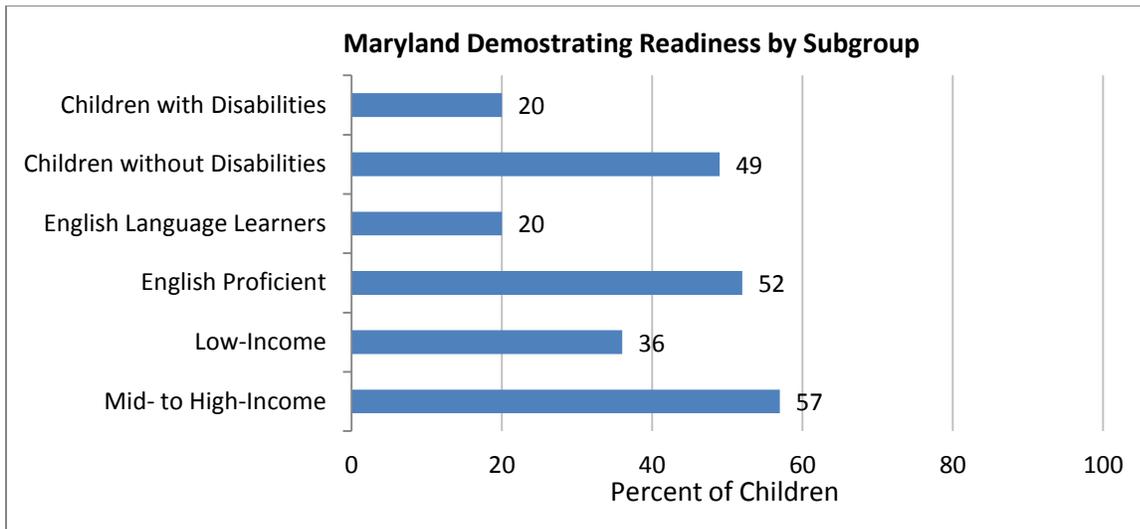
Children with disabilities, those learning the English language (ELLs), and those from low-income families have lower school readiness than Maryland kindergartners as a whole. As a result, children from these subgroups require targeted or significant support to meet curricular expectations.

Children from these subgroups comprise a large proportion of the kindergarten population. In 2014-2015, MSDE enrollment data indicate that

- 8.6% of kindergartners (5,683 children) have a disability;
- 15.8% (10,485 children) are English Learners;
- 48.9% come from low-income households, as indicated by Free and Reduced Price Meals guidelines. This year, 32,377 children were from low-income households.

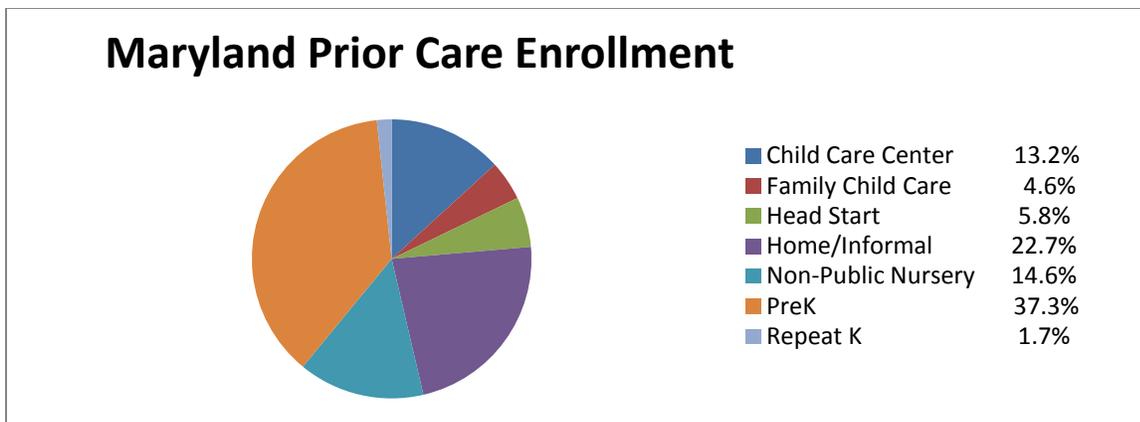
Almost a quarter of children with disabilities (20%) and ELLs (20%) reached full school readiness. More than a third (36%) of children came from low-income households. (See Graph 3)

**Graph 3: Maryland Percentage Demonstrating Readiness by Special Population Subgroup**



Graphs 4 shows the demographic breakdown of kindergarten children based on prior care arrangements, defined as early learning experiences as four-year olds. The highest percentage of children entering kindergarten come from Public Pre K (37%) and Home/informal care arrangements (23%), followed by non-public nursery (15%) and child care centers (13%).

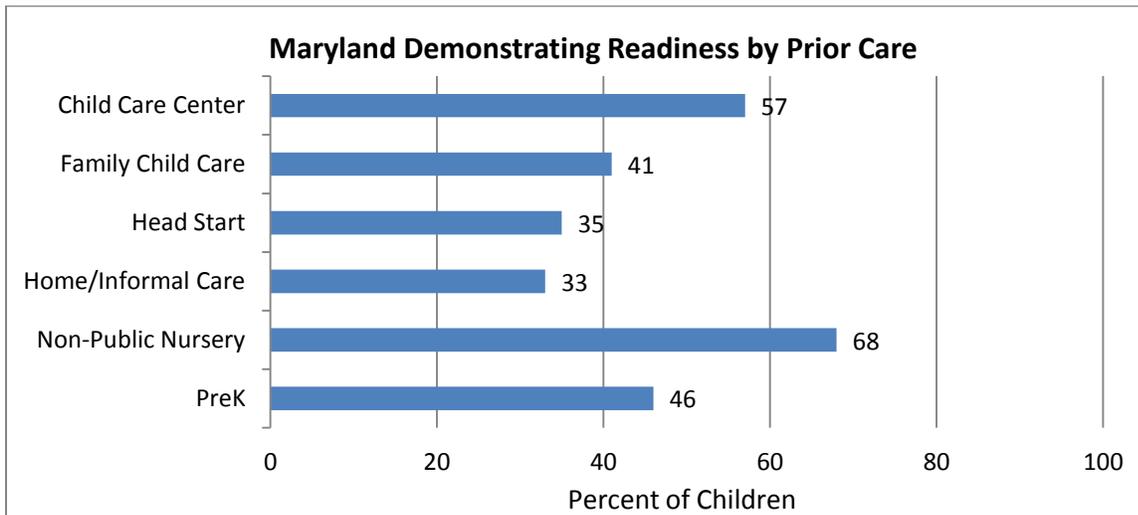
**Graph 4: Maryland Prior Care Enrollment**



Graph 5 shows the percentage of children assessed as demonstrating readiness. A higher percentage of children who came from non-public nursery schools (68%), child care centers

(57%), and state pre-k programs (46%) demonstrated readiness when compared to children from home and informal care (33%), family child care (41%), and Head Start (35%).

**Graph 5:** Maryland Demonstrating Readiness by Prior Care



**Note:** Prior care groups represent demographically different populations (i.e., Head Start and PreK are mostly low-income)

**Reliability and validation of KRA:** The KRA was systematically developed within a framework grounded in theory, research, and best practice to ensure its validity and reliability. Prior to census administration of the KRA 1.0 and during the item development phase, validity and reliability testing of the KRA consisted of benchmarking and small-scale piloting of item/task prototypes, review by ad hoc groups and a national technical advisory committee comprised of developmental psychologists, early childhood experts, and psychometricians, formal pilot testing, and field testing.

After census administration, all KRA items were evaluated for their difficulty, discrimination (i.e., item-total correlation), and internal consistency. The internal structure of the KRA was examined using a common psychometric analysis procedure to obtain an estimate of

the reliability or a measure of the extent the items on the KRA measure the same construct. Cronbach’s Alpha ( $\alpha$ ) provides an internal consistency estimate of the assessment, which is based on the correlation between each test item with other test items to form one construct. Generally, the alpha increases when the correlation between test items increases. The KRA is a low-stakes assessment, used to inform instruction. The KRA results are not used to prohibit a child from entering kindergarten or for high-stakes decisions. However, as Table 1 shows, that the inter-correlations among KRA assessment items were strong. The Alpha of .94 for the KRA overall is considered in the “Excellent” range and alpha’s by domain are considered “Good” or “Excellent” ranging from .78 for Mathematics to .91 for Social Foundations.

**Table 1:**

	<u>Cronbach’s Alpha (<math>\alpha</math>)</u>	<u>Internal Consistency</u>
KRA Overall	.94	Excellent (High-stakes testing)
Language & Literacy	.82	Good (Low-stakes testing)
Mathematics	.78	Good (Low-stakes testing)
Social Foundations	.91	Excellent (High-stakes testing)
Physical Well-Being & Motor Development	.81	Good (Low-stakes testing)

Internal Consistency Ranges: < 0.50=Unacceptable; 0.50 to 0.60=Poor; 0.60 to 0.70=Acceptable; 0.70 to 0.90=Good (Low-stakes testing);  $\geq$  0.90=Excellent (High-stakes testing);

**KRA 1.0 Standard Setting:** The role of the standard setting process was to determine how performance, as defined by scores on the assessment, relate to the performance levels. In other words, what score determines whether a student should be classified as demonstrating, approaching, or emerging readiness?

After initial internal consistency estimates of reliability were obtained, a common standard setting process called “Bookmarking” was used to determine cut scores for the KRA. A

total of 23 kindergarten teachers and early learning specialists from Maryland and Ohio, who represented a range of educational backgrounds and subgroup populations, served as panelists in this process. An essential feature of this method is the mapping of items, based on skill/item difficulty, onto a proficiency distribution where cut scores are set. With this method, panelists review an ordered item booklet in which the content of the assessment is presented in the order of difficulty, based on how students actually performed on the items. Panelists are then asked to place their “bookmark” at that point in the ordered item booklet where they believe the items would separate students into the different performance levels. For the KRA, panelists were asked to set two bookmarks. The first bookmark identified the items that separated students from the emerging to approaching readiness levels, and the second bookmark at the point in the ordered item booklet that separated students that were approaching readiness from those that were demonstrating readiness. The key distinction between the levels focused on the degree of remediation required. Students in the emerging level require significant support on a breadth of content or are lacking significant skills or behaviors in a particular domain. Those students demonstrating readiness are those who require no significant support. These students are ready to begin with instruction based on the kindergarten content standards beginning day one of the school year. The approaching readiness students are those who fall in between.

Based on the Standard Setting Process, reporting of the KRA 1.0 scores overall for the 2014 fall census administration were reported based on Performance Level Descriptors (PLD’s) that reflect the percentage of students who have reached one of the following levels of readiness:

- Demonstrating Readiness: Student demonstrates foundational skills and behaviors

that prepare [him/her] for curriculum based on kindergarten standards.

- Approaching Readiness: Student demonstrates some foundational skills and behaviors that prepare [him/her] for curriculum based on kindergarten standards.
- Emerging Readiness: Student demonstrates limited foundational skills and behaviors that prepare [him/her] for curriculum based on kindergarten standards.
- Other: A child was not able to access one or more assessment items resulting in a “No Score” for those items due to limited English proficiency, a disability, or other issues, such as chronic absence.

### **Improvements to the KRA 1.0, including connectivity, length, and administration time**

John’s Hopkins University, Center for Technology in Education (JHU-CTE), with state input, developed a survey to gather feedback from teachers in Maryland after census administration of the KRA v1.0 in the fall of 2014. The data from this survey was analyzed and provided the basis for item content review, and further development and modification of the existing technology and professional development content to support the administration of KRA v1.5. In addition, a workgroup of Maryland kindergarten teachers from the original focus group and additional kindergarten teachers recommended by the Maryland State Education Association met to provide additional feedback and suggestions to improve the efficiency and administration of the KRA v.1.5. During the summer of 2015, meetings were held with Maryland school system Local Accountability Coordinators and Data Managers to communicate the improvements being made to KRA 1.0 and to provide technical assistance.

**Length and administration time**: After completion of the fall 2014 administration of the KRA (i.e., version 1.0), feedback from the field indicated that the time and effort to

administer the assessment was very challenging. In an effort to assuage these challenges and concerns from the field, the states decided to reduce the length of the KRA. The state leadership teams, in conjunction with the assessment, technology, and professional development partners, held a meeting to review the item data and to discuss the feedback received from teacher surveys and state teacher focus groups. The goal of this meeting was to agree upon a reduced set of items that would alleviate the burden of administration, yet still retain enough content to allow for the reporting of valid and reliable kindergarten readiness results. The length of the assessment was reduced by approximately 20%, from 63 to 50 items. Of the 13 items that were removed, five were selected-response or performance-task items and eight were observational-rubric items. The decision to remove these items was based on feedback that indicated that they were more difficult or time intensive to administer or they were not as critical to the evaluation of students' readiness for kindergarten. In addition, a few items were moved to other domains based on item level analysis. This resulted in a final assessment broken out into four domains, rather than the six originally developed. The resulting version of the KRA, called version 1.5, is the current, fall 2015 version for administration.

**Technology:** The data and feedback gathered from the administration of KRA v1.0 in the fall of 2014 provided the basis for significant enhancements and expanded functionality of the technology systems to support administration of KRA v1.5 in the fall of 2015. Similar to the technology infrastructure utilized in the support and administration of the KRA v1.0 in Maryland and Ohio, the improved system includes an online reporting system (ORS), teacher dashboards and customized professional development, and a virtual performance assessment (VPA), i.e., items that can be performed by a student using touchscreen technology for immediate scoring. The Ready for Kindergarten Online is the enterprise system for KRA v1.5 data collection, user

management, reporting, and professional development. The website is used by teachers to browse the assessment items and supporting materials, enter assessment scores and comments for each child, and access embedded professional development dashboards and reports.

The Ready for Kindergarten Online provides secure access for teachers to enter student performance data and teacher observational data. Accessible via desktop computer, laptop, or tablet, the Ready for Kindergarten Online system allows for data import and export. User dashboards and reports support state-, district-, school-, classroom, and student-level data reporting and analysis. Customizable views and reports can be created for families, teachers, and administrators at the school, district, or state levels. Specific improvements for the administration of KRA v1.5 included the following:

- Newly updated KRA App including 17 items plus a tutorial/practice item
- Supports for the KRA App and a walk through of the Ready for Kindergarten Online
- Information and resources for the KRA Score Reports
- Printable KRA 1.5 Score Sheet for 2015
- Dashboard access to student assessment results for immediate use by teachers
- Individual Student Reports and Parent Reports available directly within the system in November.
- Parent Individual Student Report available in multiple languages in November: English, Spanish, Chinese, French
- More than one teacher can be assigned to a student within the system to enter data on behalf of that child. The last score for each assessment item entered at the close of the assessment window is what counts for reporting.

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- Each assessment item defaults to *Needs to be Administered* in order to assist teachers with keeping track of student data and which assessment items are complete
- Print Score Sheet feature populates the student names on the score sheet.
- One spreadsheet feature for the entire assessment where scores are auto-saved each time a score is entered. Assists with speed of data entry to reduce teacher burden and also addresses issues of connectivity.

In addition to the improvements described above, the JHU-CTE Technology Team also implemented a User Acceptance Test (UAT) prior to the administration for KRA v1.5. During the UAT stakeholders (kindergarten teachers and school system data managers) tested the technology and software to make sure it could handle required tasks in real-world scenarios, and according to specifications. A total of 25 teachers, 17 from Maryland and eight from Ohio, and four data managers, two from each state, participated in the UAT. Teachers tested the teacher interface that collects the student KRA scores as well as the KRA App in which the student interacts to complete a portion of the assessment items via technology. Data managers tested the data manager interface for manual and bulk loading teacher, student, and enrollment data.

After testing the technology, teachers and data managers answered a number of questions regarding their experience with the system. Feedback and issues were categorized based on system bugs, system enhancements, and assessment content changes. System bugs were replicated and fixed prior to the system launching. Enhancements were prioritized based on their need, usefulness, and complexity. Some enhancements were made prior to the launch of KRA

v1.5. Other system enhancements and assessment content changes will be considered for the next round of development for the next system implementation version (KRA v2.0).

**Professional Development:** The professional development of early childhood educators is the key to success of the R4K system, as the quality of the assessment data depends on how well teachers implement the assessments. Professional development activities were organized around three stages of assessment, including pre-administration, administration, and post-assessment analysis and use of data to inform instruction.

Teacher dashboards and customized professional development provide contextualized resources to support instruction and the use of best practices in the classroom. Data from the Ready for Kindergarten Online system for KRA v1.5 generates information and recommendations for instructional groupings, as well as targeted instruction based on individual child and class performance. Suggested instructional activities are available for teachers to incorporate in daily lesson planning. Simulation software familiarizes teachers with assessment protocols and use of professional-development resources. Based on the data and feedback gathered from the administration of KRA v1.0 and the UAT, the following improvements were made for the professional development to support administration of KRA v1.5:

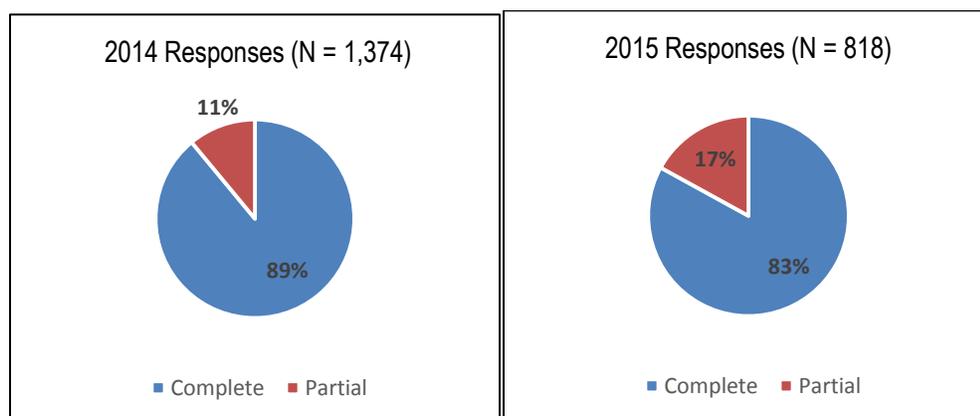
- New teacher Observation Planning Guide that is aligned to the Teacher Administration Manual and observation videos for observation practice,
- New resources for integrating administration of the KRA throughout the kindergarten day,
- Teacher Tips for administering the KRA,
- Updated Universally Designed Allowances with supporting activities and resources

- Updated Guidelines document and corresponding activities and resources in supporting individual children,
- Supports for the KRA App and a walk through of the Ready for Kindergarten Online System
- Information and resources for the KRA score reports,
- Item-by-item supports for the administration of all KRA items,
- Additional domain-specific resources for supporting the essential skills, knowledge, or behaviors for the Common Language Standards,
- Proctor guidelines for teachers working with trained instructional assistants or paraprofessionals to monitor students accessing r KRA App items in their classroom were created for the KRA 1.5,
- Updated Teacher Administration Manual for the Blind and Visually Impaired including foam and tactile manipulatives.

### **Feedback from fall 2015 administration**

The window for the second year of administration of the Kindergarten Readiness (KRA) opened on August 17, 2015 and closed on November 1, 2015. John’s Hopkins University, Center for Technology in Education (JHU-CTE), with state input, revised the previous survey to gather feedback from teachers in Maryland regarding administration of the KRA v1.5. For the 2015 Kindergarten Readiness Assessment (KRA) Teacher Survey, 818 responses were recorded as of November 23, 2015. The 2014 version of the survey had 1,374 responses. The item response rate of the questions analyzed ranged from 60 – 91%.

**Figure 1. Proportion of partial to complete responses for 2014 and 2015 survey administrations**



**KRA Administration: Length of time needed.** Survey respondents were asked to indicate the number of minutes on average needed to administer the KRA to a) a typically developing child; b) a child with a disability, and c) a child who is an English language learner (ELL).

Approximately 90 percent of respondents to the 2015 survey answered the question for a typically developing child.<sup>1</sup> The median was 40 minutes, and the mean was 43.68 minutes. About 95% of those who responded reported 10 – 90 minutes per child, with the largest proportion (23%) reporting 30 minutes on average for administration per child. In 2014, 91 percent of respondents indicated the average amount of time required to administer the KRA to a typically developing child. About 30 percent of respondents reported 46-60 minutes for KRA administration.<sup>2</sup> The mean and median for 2015 data are lower than the most frequently reported timeframe in 2014, suggesting that in general, 2015 respondents needed slightly less time to administer the KRA to a typically developing child.

<sup>1</sup> Five respondents who reported '0 minutes' were treated as missing and not included. One respondent reported '1,000,000'; this response was also not included.

<sup>2</sup> In the 2014 survey, respondents were provided with answer categories including ranges of minutes, which allows for reporting of frequencies. In the 2015 survey, respondents wrote in the number of minutes, allowing for calculation of means and medians.

Nearly two thirds (65%) of respondents in 2015 reported the average number of minutes needed to administer the KRA to children with disabilities.<sup>3</sup> The median and mean were slightly higher than the amount of time needed with typically developing children; 50 minutes and 57.02 minutes, respectively. About 95% of those who responded reported 15 – 120 minutes per child, with the largest proportion (20%) reporting 60 minutes on average for administration per child. In 2014, 82 percent of respondents reported on time required to administer the KRA to children with disabilities. Results skewed higher compared to 2014 reports of KRA administration to typically developing children: 30 percent of respondents reported needing 61-90 minutes for KRA administration to children with disabilities. The mean and median for 2015 were lower than the time claimed by 2014 respondents, similar to results comparing responses from both years for typically developing children.

In 2015, 63% of respondents reported the average number of minutes needed to administer the KRA to ELL children.<sup>4</sup> The median was 50 minutes, and the mean was 54.53 minutes. About 95% of those who responded reported 15 – 120 minutes per child, with the largest proportion (19%) reporting 60 minutes on average for administration per child. Seventy nine percent reported on time needed to administer the KRA to ELL children in 2014. Results were similar to those on children with disabilities in the same year: 29 percent reported needing 61-90 minutes. Again, the mean and median for 2015 results were lower.

Overall, respondents in 2014 and 2015 reported that the least time was required to administer the KRA to typically developing children. Timeframes required for children with disabilities and ELL children were similar within each year. In general, 2015 respondents

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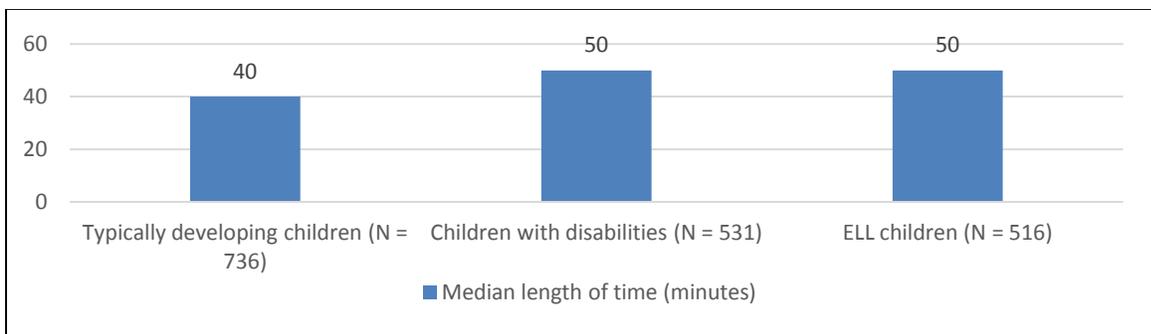
<sup>3</sup> Seventy nine respondents who reported ‘0 minutes’ were treated as missing and not included. One respondent reported ‘1,000,000’; this response was also not included.

<sup>4</sup> Eighty eight respondents who reported ‘0 minutes’ were treated as missing and not included. One respondent reported ‘1,000,000’; this response was also not included.

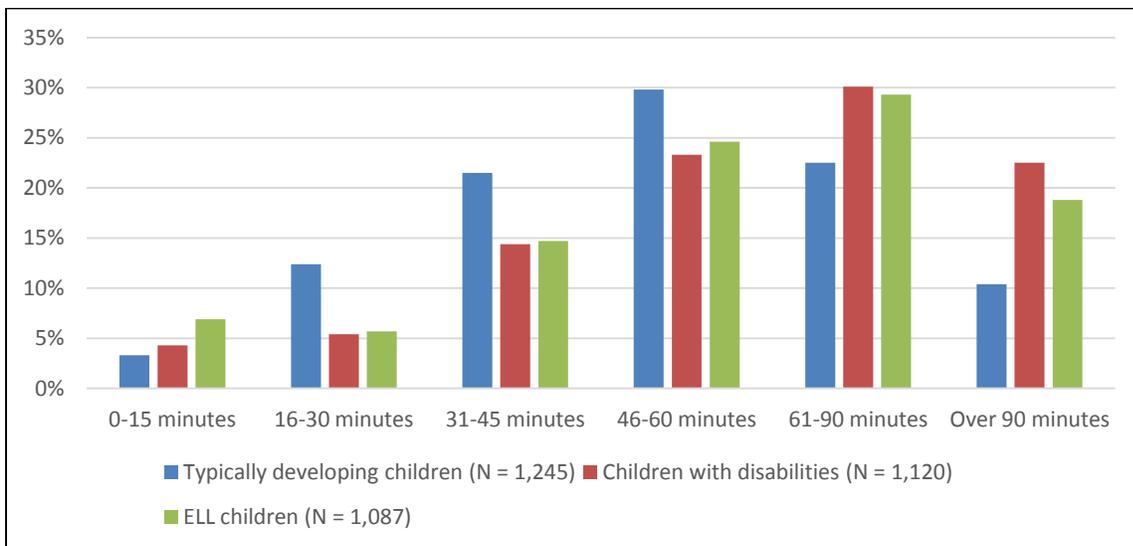
reported slightly less time needed for KRA administration across all three groups. However, it should be noted that there were many comments about the time-consuming nature of the assessment from respondents for both years.

Figures 2 and 3 below provide more details on the amount of time needed for KRA administration to the three groups of children for 2014 and 2015 survey respondents.

**Figure 2. Median length of time reported for KRA administration to different groups of children: 2015 respondents**



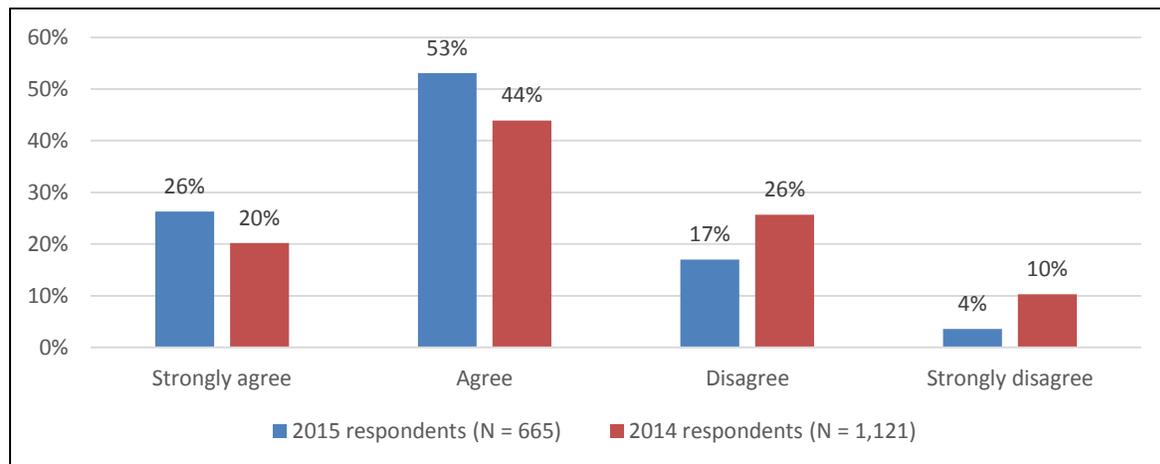
**Figure 3. Length of time reported for KRA administration to different groups of children: 2014 respondents**



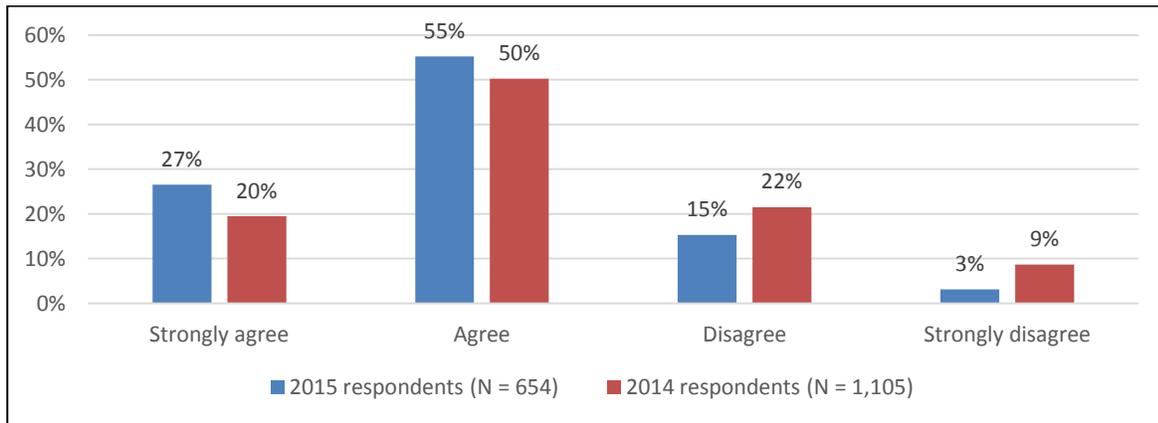
**KRA Administration: Internet connectivity & reliability.** Survey respondents were asked to comment on the reliability and speed of their internet connection during the KRA administration window and while using the KRA applications, by indicating their level of agreement with four statements (see figures below for details).

The majority of respondents in 2015 (77 – 82%, depending on the item) agreed or strongly agreed that internet connectivity did not interfere with using the KRA apps or the online system during the KRA administration window. Although results were less positive in 2014, the majority of respondents during that year (60 – 70%, depending on the item) also agreed or strongly agreed that internet connectivity did not interfere with KRA administration. See the figures below for comparisons between response frequencies for both years.

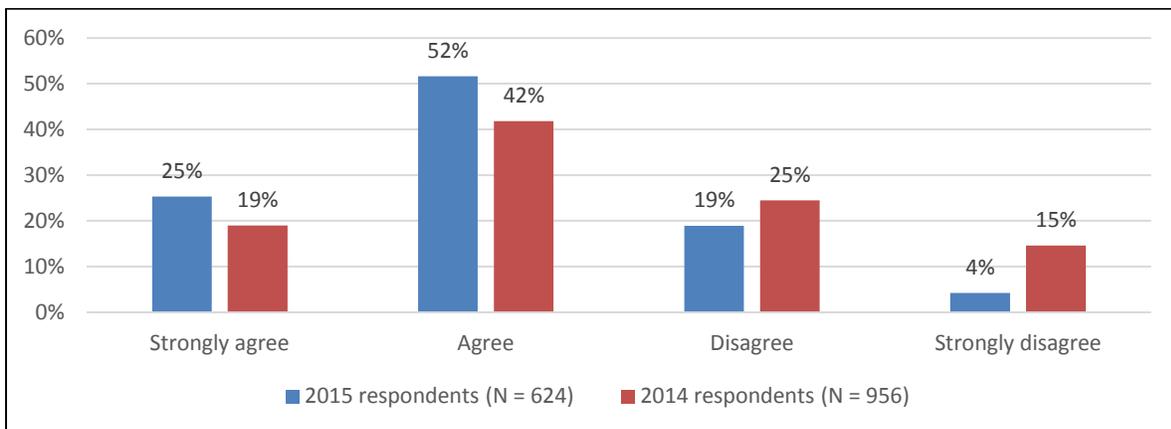
**Figure 4. Respondents’ agreement on internet connection reliability during the KRA assessment window: 2014 & 2015 results**



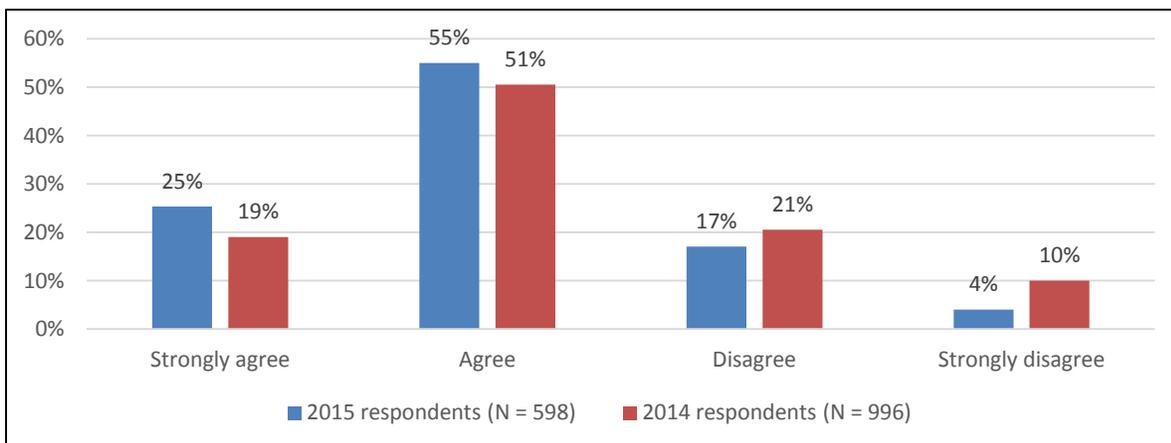
**Figure 5. Respondents’ agreement on speed of internet connection for successful use of Ready for Kindergarten Online System: 2014 & 2015 results**



**Figure 6. Respondents’ agreement on speed and reliability of internet connection for successful use of the KRA app: 2014 & 2015 results**



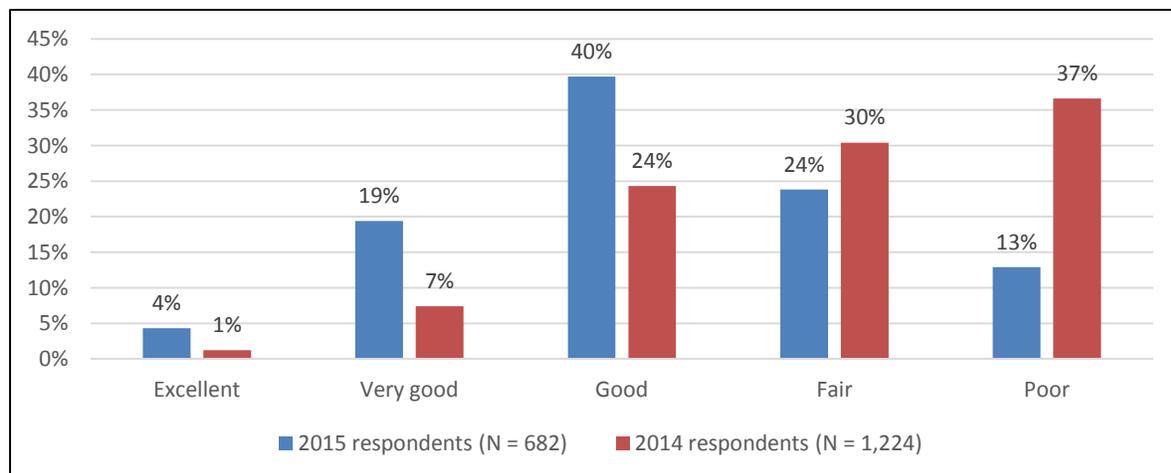
**Figure 7. Respondents’ agreement on speed and reliability of internet connection for successful use of the KRA desktop app: 2014 & 2015 results**



**KRA Administration: Overall experience.** Survey respondents were asked to rate their experience with administering the KRA in 2014 and 2015. Eighty three percent of respondents reported an answer in 2015, and 89 percent of respondents answered the question in 2014. In 2014, a third (33%) of respondents reported an experience that was “good” or better (i.e., “excellent” or “very good”). Results were more positive among 2015 respondents, with nearly two thirds (63%) of respondents reporting a “good” or better experience. Over two thirds (67%) of respondents in 2014 reported a “fair” or “poor” experience, whereas 37 percent of respondents in 2015 reported the same. See Figure 7 below for a comparison of response frequencies between 2014 and 2015 respondents.

Although responses on overall experience were better in the second year, it should be noted that a number of concerns were raised in open-ended comments about the value of the assessment, as it takes away from instructional time, the length of time required to administer it, and the timing. Respondents were concerned that kindergarteners were being assessed numerous times within the testing window, and raised questions about whether an assessment of kindergarten readiness should take place before children enter kindergarten.

**Figure 8. Respondents’ satisfaction with KRA administration experience: 2014 & 2015 results**



## **EARLY LEARNING ASSESSMENT (ELA)**

The ELA is a formative assessment intended to provide information about a child's performance in early childhood content areas that will help to inform and differentiate instruction. It is a component of Maryland's Ready for Kindergarten (R4K) System along with the Kindergarten Readiness Assessment (KRA), which is the summative measure of entering kindergartener's school readiness in relation to established expectations for all children. The ELA is supported by learning progressions across developmental domains that define the early learning and developmental progression from 36 to 72 months. The Early Learning Assessment (ELA) informs the assessment standards for the KRA (at around 66 months).

The ELA is an optional assessment, except for children with disabilities. For young children with disabilities, the ELA can serve as one of multiple sources of data to help inform measures of child progress against three broad child outcomes defined by the U.S. Department of Education, Office of Special Education Programs (OSEP). These 3 child outcomes are reported annually as a measure of program effectiveness in narrowing the school readiness gap for young children with disabilities and are part of all states' federal accountability requirements. The ELA can also support the development of standards based Individualized Education Programs (IEP) that are aligned with the Maryland Early Learning Standards.

The downward extension of the ELA learning progressions was especially important for the special education preschool population because it will allow for the assessment of children chronologically 36 to 72 months of age who may demonstrate skills, knowledge and behaviors at an earlier developmental level in one or more domains. The ELA can also be utilized by child care , Head Start or public prekindergarten and kindergarten teachers for the general education population. Being used as such, the ELA is intended to allow teachers to

differentiate instructional planning and serve as a measure for progress monitoring. The learning progressions and tasks for the ELA from 36 to 72, along with the downward extension to capture developmentally earlier performance of children with disabilities, have been completed, and will be ready in time for training of local program staff, both general education and special education teachers, after January 2016.

The professional development for the special education Training of Trainers (ToT) was conducted from August through October, 2015, and consisted of 3 days of face-to-face training. The professional development at the district level for special education teachers will consist of 2 days of training (face-to-face or blended) with three days of instructional support provided by the trainers, and will be completed by May 2016. The 2016-2017 school year will be a pilot year for the administration of the ELA to preschool children with disabilities, with revisions based on teacher feedback to be incorporated into the ELA for a full rollout projected for the following school year (2017-2018). ToTs for general education teachers, including public school general educators, and child care providers, will take place beginning in January 2016. Then there will be a phased rollout of district level training based on expressed interest in use of the ELA. The ELA materials will be available for all teachers in the form of a kit available through the Maryland State Department of Education.

**Issues identified and potential resolutions:** The feedback received from the census administration of KRA v1.0 required many changes and enhancements be made to prepare for the implementation of KRA v1.5. The time and staffing necessary to implement these changes and enhancements required the leadership teams from both Maryland and Ohio to make tough decisions regarding the final development and deployment of the ELA. The roll-out of the ELA, therefore, was delayed. The details of the roll-out were provided in the previous paragraphs.

## **SUMMARY**

Maryland’s current assessment system includes a kindergarten entry assessment, targeted at children aged 66 months, and formative assessments for children aged 36 through 72 months, i.e., Early Learning Assessment. Combined, these two assessment components can provide key stakeholders—families/caregivers, educators, administrators, and policymakers—with a balanced view of students’ learning needs and provide actionable information to help tailor instruction and interventions. The KRA and the formative assessments are part of an overall educational system that includes early learning and development standards, curricular resources and instructional practices, professional development, and instructional interventions and policy improvements. The system has been designed to enhance the school-readiness skills of entering kindergarten students and ensure that students are on a learning trajectory to graduate from high school ready for college and careers.

The R4K assessment system has been systematically developed within a framework grounded in theory, research, and best practice to ensure its validity and reliability. The reporting scale of both the formative assessments and the KRA will allow the progress of individual students to be tracked within and across school years and allow cohorts to be tracked across years.